REMARKS

Claims 1-32 are pending, and claims 5-7 and 29-31 are allowed. Claims 1-4 and 13 have been amended. In view of the following, all of the claims are in condition for allowance. If after considering this response the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a telephone interview with the Applicant's attorney to further the prosecution of the application.

Rejection of claims 2, 4 and 6 under 35 U.S.C. §112, second paragraph

Claims 1-4 have been amended to clarify that disk sectors comprise tracks. As shown in FIGS. 1-4 of the present application, it is well known in the art that a storage disk 10 may be partitioned into a number of disk sectors 12. Each disk sector 12 may include a number of concentric data tracks 14, where data is stored in data sectors within each track 14. As a result, disk sectors 12 comprise data tracks 14.

Rejection of claims 1-4, 8-28 and 32 under 35 U.S.C. §102(b) as being anticipated by Tuttle et al. (US 5,796,535)

Claim 1

Claim 1 recites a servo wedge having a portion that does not include a zero-frequency field and that is detectable during a spin up of a disk without a prior detection of a zero-frequency field.

For example, referring, *e.g.*, to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, in an embodiment a servo wedge 22 includes a preamble 74 that does not include a zero-frequency field. During spin up of the disk, a servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74 without the need to first detect a zero-frequency field. Once the preamble 74 is detected, then a disk-drive controller may read the sector and track IDs 80 and 82 to determine an initial

position of a read-write head over the disk. As a result, the disk's data-storage capacity can be increased by reducing the number of, or altogether eliminating, zero-frequency fields in servo wedges.

Tuttle, on the other hand, does not disclose a servo wedge having a portion that does not include a zero-frequency field and that is detectable during a spin up of a disk without a prior detection of a zero-frequency field. Instead, Tuttle discloses a disk drive that actually *requires* a zero-frequency field (or DC erase field) during spin up of the disk. Specifically, Tuttle states that a special sequence of bits (a long sequence of "0" bits) is recorded in at least one of the servo wedges, and that this zero-frequency field must first be detected before the read channel can locate and acquire the remaining servo wedges (col. 15, lines 24-41).

Therefore, Tuttle fails to disclose or suggest all of the features of claim 1. Accordingly, claim 1 is distinguishable over Tuttle.

Claim 2

Claim 2 is patentable by virtue of its dependency from claim 1.

Claim 3

Claim 3 recites a storage disk comprising servo wedges and no zero-frequency spin-up fields associated with the servo wedges.

In contrast, as discussed above in conjunction with claim 1, at least one of Tuttle's servo wedges must include a zero-frequency field (or DC erase field).

Claim 4

Claim 4 is patentable by virtue of its dependency from claim 3.

Claim 8

Claim 8 recites a storage disk comprising no zero-frequency spin-up fields.

In contrast, as discussed above in conjunction with claim 1, Tuttle's disk must include at least one zero-frequency field (or DC erase field).

Claims 9-13

These claims are patentable by virtue of their dependencies from claim 8.

Claim 14

Claim 14 recites a disk drive system comprising a processor operable to detect one of the servo wedges without a zero-frequency field during spin up of the disk before the servo channel recovers servo data from any other of the servo wedges.

In contrast, as discussed above in conjunction with claim 1, Tuttle must detect a zero-frequency field (or DC erase field) in at least one of the servo wedges before the read channel can locate and acquire the remaining servo wedges.

Claims 15-19

These claims are patentable by virtue of their dependencies from claim 14.

Claim 20

Claim 20 recites a disk drive system comprising a processor operable to detect the servo wedge without a zero-frequency field during a spin up of the disk before the servo channel recovers any servo data.

In contrast, as discussed above in conjunction with claim 1, Tuttle must detect a zero-frequency field (or DC erase field) in at least one of the servo wedges before the read channel can recover any servo data from the remaining servo wedges.

Claims 21-24

These claims are patentable by virtue of their dependencies from claim 20.

Claim 25

Claim 25 as amended recites writing onto a surface of a data-storage disk a servo wedge that includes servo data that is detectable during a spin up of the disk and provides an initial position of a head during the spin up of the disk, and writing onto the surface of the disk no zero-frequency spin-up field that is associated with the servo wedge.

In contrast, as discussed above in conjunction with claim 1, Tuttle must detect a zero-frequency field (or DC erase field) in at least one of the servo wedges in order to determine the initial head location during spin up of the disk.

Claims 26-28

These claims are patentable by virtue of their dependencies from claim 25.

Claim 32

Claim 32 is patentable for reasons similar to those recited above in support of the patentability of claim 8.

Allowable Subject Matter

Claims 5-7 and 29-31 are allowed.

CONCLUSION

In light of the foregoing, claims 1-32 are in condition for allowance, which is respectfully requested.

In the event any fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a phone interview with the Applicant's attorney at (425) 455-5575.

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Respectfully submitted,

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